



## Notes From Underground

An update on source water protection and underground pollution control from the United States Environmental Protection Agency (EPA), Region 9, serving Arizona, California, Hawaii, Nevada, Native American Tribes, and the Pacific Islands.

Summer 1998  
EPA 909-N98-002  
*adapted from EPA 816 F-98-009*

### Attention:

Injection Well Owners  
Public Water Systems  
Regulators  
Public  
Watershed groups

### FOR PUBLIC COMMENT

Comments on any/  
all of this proposal  
due to EPA  
by 9/28/98

## EPA Announces Proposed Regulatory Changes as Part of a Comprehensive Strategy for Class V Injection Wells

**What is a Class V Injection Well?** Underground Injection Control (UIC) Class V Injection Wells are typically shallow disposal systems that are used to place a variety of fluids below the land surface, into or above underground sources of drinking water (USDWs.) Class V wells are often called "shallow disposal wells." Shallow and deep injection wells are regulated by EPA and state UIC programs in order to protect USDWs from contamination.

**Why are Class V wells of concern?** EPA estimates there are more than one million Class V injection wells currently in the United States, located in every state. The fluids released by some wells may contain elevated concentrations of contaminants that may endanger drinking water.

**Are Class V injection wells currently regulated?** Class V injection wells are regulated by the UIC program, whose governing regulations were promulgated under the authority of Part C of the SDWA. Under the existing federal regulations, Class V shallow injection wells are "authorized by rule," (40 CFR Part 144), which means they usually do not require a permit if they do not endanger underground sources of drinking water and comply with other UIC program requirements.

The conditions of rule authorization are twofold: first, basic inventory information about the Class V injection well must be submitted to EPA or the state primacy agency; second, the Class V injection well must be constructed, operated, and/or closed in a manner which protects USDWs. EPA or a state primacy agency may ask for additional information or require a permit in order to ensure that ground water quality is adequately protected. Further, many UIC primacy state programs have additional prohibitions or permitting requirements for certain types of Class V injection wells.

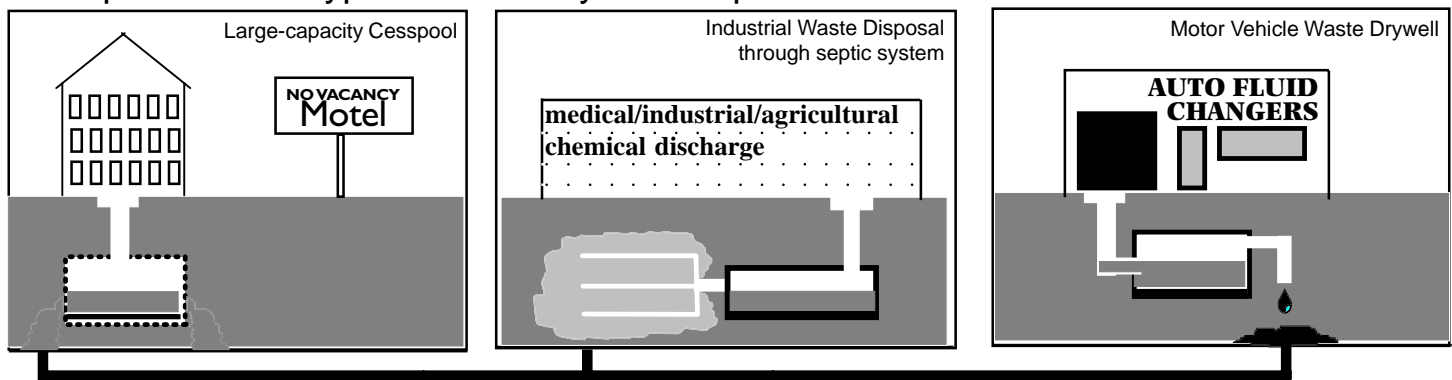
### Regional Class V UIC Program ►

EPA Region 9 has formally delegated the Class V program to Nevada, Guam and the Northern Marianas Islands. For the remainder of Region 9 (Arizona, California, Hawaii and Indian Country), EPA staff are responsible for directly implementing the UIC regulations. With varying degrees of involvement by state, local and tribal environmental regulatory programs, the Region 9 UIC program attempts to identify and control threats to underground sources of drinking water, through inventory and closure of Class V wells. Regional UIC priorities are established based on actual and potential health implications of various contaminants and the level of regulatory oversight already invested in a particular type of disposal well. If a local or state regulatory agency is actively managing a particular contaminant threat, federal UIC staff focus elsewhere. A major effort by this office has been reaching out to other agencies about this regulation, providing training, guidance (and occasionally funding) to develop local ground water protection programs.

Even so, it is the Region's opinion that many Class V well types are not adequately controlled. Like needles in a haystack, shallow disposal wells are difficult to find. Funding for the program in Region 9 has remained at less than \$600,000 per year for over ten years. And because other UIC programs, even those with very relevant objectives, are similarly limited by resources, convincing other agencies to look out for these wells is a continuous challenge. Will the proposed regulations improve our program?

*continued*

## Examples of Well Types Affected by this Proposal



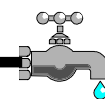
**What are the proposed regulatory changes?** Consistent with the national priority established by the 1996 SDWA Amendments, the proposed Class V rule, 40 CFR 144, Subpart-G - Requirements for Owners and Operators of Class V Injection Wells, focuses on known high-risk Class V injection wells in Source Water Protection Areas (SWPAs) as delineated by state Source Water Assessment programs.

**Two sets of rules? Targeting stricter requirements to areas of known vulnerability.** The 1996 Amendments to the Safe Drinking Water Act (SDWA) establish source water protection as a national priority. The Amendments require states to establish Source Water Assessment Programs (SWAPs) that fit their particular needs and conditions. A SWAP is complete when states: 1) obtain EPA approval of the state's strategic approach to conducting the assessments; 2) delineate the boundaries of the assessment areas in the state from which one or more public water systems (PWSs) receive supplies of drinking water; and 3) identify, to the extent practical, the origins of regulated and certain unregulated contaminants in the delineated area to determine the susceptibility of PWSs to such contaminants.

**High Risk Well Types.** The proposed Class V regulation would affect the owners and operators of these wells in SWPAs delineated for community water systems and non-transient, non-community water systems that rely on at least one ground water source. Well types included are:

1. **Large Capacity Cesspools** (20 or more persons/day, includes drywells used for this purpose)
  - New large capacity cesspools prohibited
  - Existing large capacity cesspools phased out over 5 years
2. **Industrial Waste Disposal Wells**
  - Would be prohibited from exceeding drinking water standards or other health-based limits at point of injection
  - Must meet MCLs within 90 days of the completion of its local SWAP.

### MULTIPLE BARRIER APPROACH to drinking water protection



\$	Prevention
\$\$	Treatment
\$\$\$	Remediation

### 3. Motor Vehicle Waste Disposal Wells (two options proposed)

- a) ban motor vehicle wells completely, or
- b) owners would be able to apply for a permit that would require waste to meet MCLs and all other health-based limits at the point of injection

**(for both options)** Owners would have to close their well or apply for a permit within 90 days of the completion of its local SWP.

If states do not complete their SWAP by the extended deadline of May 2003, these UIC requirements would apply **statewide**.

**Why are the new regulations being proposed?** EPA believes that it is necessary to establish more specific minimum standards for certain high-risk wells. In addition to establishing these minimum standards, the revised Class V UIC regulations will:

- satisfy the requirements under SDWA Section 1421, which require the EPA Administrator to publish proposed regulations for state UIC programs
- integrate UIC regulations with the Source Water Protection Program
- fulfill certain EPA obligations under a 1997 court decree.

**What about other types of Class V injection wells?** Other types of Class V injection wells are not covered under the current proposal. More information is needed to characterize the risk from these well types and determine whether additional federal regulations for these other well types is necessary, and if so what that additional regulation should entail. As the second step in this strategy, EPA is undertaking

further study to assess risks, fill existing information gaps, and provide a factual basis for any further regulatory action (see back page.)

**For more information:** The Proposed Revisions to the Underground Injection Control Regulations for Class V Injection Wells were published in the Federal Register on July 29, 1998 (63 FR 40586).

For a copy of the rule, see [www.epa.gov/OGWDW/uic/c5-fra.html](http://www.epa.gov/OGWDW/uic/c5-fra.html), or call one of Region 9's UIC Class V staff (see map, above) to have a copy mailed to you.

If you have questions about the proposed rule, please contact a Region 9 staff person or:

- the Safe Drinking Water Act Hotline at (800) 426-4791 EST (email: [hotline-sdwa@epamail.epa.gov](mailto:hotline-sdwa@epamail.epa.gov)) or
- Robyn Delehanty, Class V Rule Manager, at (202) 260-1993, EST (email: [delehanty.robyn@epamail.epa.gov](mailto:delehanty.robyn@epamail.epa.gov)).

## WHAT DO YOU THINK?

**EPA does not want to put forward this regulation without adequate consideration by all affected parties. We particularly seek comment in the following areas.**

**1. Scope of applicability.** Should the new Class V regulations apply to areas beyond delineated SWPAs, or even statewide? What are some alternatives to permanently applying the new requirements statewide if a state's SWAP is not completed by May 2003? Should existing Class V industrial permits be reviewed for consistency with the new standard?

**2. Risk Assessment.** Do commenters support the current designation of motor vehicle and industrial wells in source water protection areas as "high risk"? Is there a better (broader or narrower) definition that EPA could use to identify high risk wells? Should EPA revisit its definition of "underground sources of drinking water," particularly in regards to the 10,000 ppm total dissolved solids standard?

### 3. Requirements for specific types of wells:

**Motor Vehicle Waste Disposal:** Should the EPA allow motor vehicle or industrial facilities in SWPAs to exceed Maximum Contaminant Levels (MCLs) and other health based standards at the point of injection under certain conditions? Is the installation of a semi-permanent plug an adequately protective method of well closure?

### Federal UIC-Class V Staff at EPA Region 9



**Industrial Stormwater:** EPA is proposing to treat stormwater management wells that may receive leaks, drips, or spills (such as drainage wells in gasoline service station parking lots) that are commonly contained in street runoff as drainage wells. What are the merits and potential impacts of not regulating drainage wells under this regulation?

**Cesspools:** Should the ban on large-capacity cesspools be expanded to SWPAs delineated for transient non-community systems that use ground water as a source? Should the distinction between septic systems used by single family homes and small non-residential septic systems that receive solely sanitary waste be eliminated? Should all septic systems and cesspools with a capacity to serve fewer than 20 persons a day, without distinguishing between residential and non-residential, be excluded?

**4. Regulatory Approach.** If the final regulation includes permitting, what specific requirements are needed to ensure protection of USDWs? The rule requires owners and operators to give pre-closure notification for programs administered by the EPA. Should this and other requirements be extended to Primacy States?

**To comment on any or all of the proposed rule, see back cover for instructions.  
Thanks**

### - Other News -

Region 9 is updating its 1992 "Guidelines for the Closure of Shallow Disposal Wells." If you would like to participate in peer review of this document, scheduled for Fall 1998, please call or email Liz Janes or Joaquin Cruz.

## TO COMMENT ON THE PROPOSED CLASS V UIC RULE:

The proposal asks for comments on a number of variations to the proposed approach to these well types. These include, applicability to Primacy States, linkage with SWPA and the well types chosen for regulation, and other points that might affect you. We recommend that you read the preamble carefully and consider submitting comments. EPA will accept public comment on the proposed regulation until **September 28, 1998**. Address written comments to:

UIC Class V, W-98-5, Water Docket (MC-4101)  
EPA, 401 M Street SW, Washington, DC 20460

**Comments may be submitted electronically to [ow-docket@epamail.epa.gov](mailto:ow-docket@epamail.epa.gov).**

### Shallow Disposal Well Study:

US EPA Headquarters is conducting a national research project to gather all published information regarding the use and occurrence of the following types of injection wells not addressed by the 1998 proposed rule. An overview of the study, copies of draft reports (in PDF format), and instructions on how to comment and/or submit additional information are located on the Internet at this address: [www.epa.gov/OGWDW/uic/cl5study.html](http://www.epa.gov/OGWDW/uic/cl5study.html). For questions about the study, call Anhar Karimjee at (202) 260-3862.

## Ground Water Protection Council 1998 ANNUAL FORUM

**Sacramento, California**

**September 20-23**

For more information, see the  
Ground Water Protection  
Council website at [gwpc.site.net](http://gwpc.site.net).

## Groundwater Resources Association (GRA)

California Groundwater:

Effective and Efficient Usage

for the Year 2000 and Beyond,

**Walnut Creek, California      October 22-24, 1998**

For more information, see the GRA website at  
[www.grac.org](http://www.grac.org), or call GRA at 916-669-3279.

## Groundwater Guardian National Conference Bringing Groundwater to Life!

Anaheim, California      November 12-15, 1998

For more information, call  
the Groundwater Foundation at (800) 858-4844.

## Notes From Underground

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